

Minnesota Forest Resources Council

Minutes

Department of Transportation Training and Conference Center, Arden Hills, MN

March 19, 2014

Members Present: Bob Stine (Chair), Susan Solterman Audette, Greg Bernu, Forrest Boe, Wayne Brandt, Alan Ek, Shaun Hamilton, Bob Lintelmann, Gene Merriam, Dave Parent, Mike Trutwin

Members Absent: Darla Lenz, Dale Erickson, Bob Owens, Shawn Perich, Kathleen Preece, Mary Richards

Staff Present: Dave Zumeta, Lindberg Ekola, Rebecca Enfield, Calder Hibbard, Rachael Nicoll, Rob Slesak, Clarence Turner

Guests: Mark Abrahamson (MDA), Brian Buhr (U of MN), Anna Dirkswager (MN DNR), Amber Ellering (MN DNR), Geir Friisoe (MDA), Dick Hemmingsen (U of MN), Bruce ZumBahlen (MFA)

Vision for the College of Food, Agriculture and Natural Resource Sciences

Bob Stine began the meeting with introductions. He introduced Professor Brian Buhr, Interim Dean of the College of Food, Agricultural and Natural Resource Sciences (CFANS) and Director of the Minnesota Agricultural Experiment Station. Brian spoke about his background and his career at the U of MN since 1992.

Brian discussed the potential merger of the College of Biological Sciences (CBS)/CFANS. Listening sessions took place in the fall. Two major concerns were identified: 1) student, faculty, and stakeholder engagement in and concerns about a merger; and 2) the medical focus of CBS. As a result of these concerns, the proposed merger did not take place.

Brian spoke about the Minnesota Aquatic Invasive Species Research Center (MIASRC) that is housed at the U of MN and funded by the legislature. This year, two companion bills that would create a Minnesota Terrestrial Invasive Species Research Center are currently in hearings. A funding proposal has been sent to the LCCMR. A broad range of expertise across multiple departments at the U of MN would be engaged to address this challenge strategically.

He also mentioned the MNDrive Initiative which appropriates \$18 million in recurring funds to invest in four areas: 1) neurobiology, 2) global food security, 3) bio- remediation, and 4) robotics. The work of CFANS fits well within these categories. CFANS is looking for industry partnerships for collaboration geared towards the economy and natural resources.

Brian spoke about “The Grand Challenge” facing CFANS. As Interim Dean, Brian desires to identify overarching, college-level goals to address this challenge. This includes building the next generation workforce by engaging students earlier in the curriculum and addressing achievement gap and diversity issues.

Brian also discussed the future of research in CFANS. Department head meetings have focused on overarching needs. Strategic investments are needed to address significant issues such as climate change, landscape-scale management, informatics and technology needs, biodiversity and invasives, and the faculty age distribution at the college. CFANS' ability to cut across various areas of expertise is valuable. The college must be externally oriented. CFANS looks to fully engage its comparative regional potentials: it is the only Land Grant University in an urban area with a wide array of disciplines, Minnesota's diverse landscape, and Minnesota's great industrial base. CFANS also intends to expand its global research.

Chair's Remarks

Bob Stine spoke about the Minnesota Forest Industry Global Competitiveness Assessment, initiated by a request from the Commissioner of the DNR. The Steering Committee met in February and identified potential comparison locations and key issues. The Work Group and staff are gathering further information. Dave Parent asked if the report could focus on inherent productivity. Greg Bernu commented on the importance of distance to markets. Bob believes that the final report will come from the Steering Committee, not the council. Membership of the Steering Committee and Work Group was discussed; staff will e-mail membership to Council members after the meeting.

Bob also noted that he replied to the letter received from the Minnesota Forest Resources Partnership regarding a potential forest resources conference this coming winter. The council is happy to participate.

Approval of Meeting Minutes*

Mike Trutwin moved, and Dave Parent seconded, the November 13, 2013 MFRC meeting minutes. *The minutes were unanimously approved.*

Approval of Agenda*

Wayne Brandt moved, and Dave Parent seconded, the amended March 19, 2014 MFRC meeting agenda. *The amended agenda was unanimously approved.*

Executive Director Remarks

Dave Zumeta noted that the Work Group met earlier this week and is actively developing information in response to the Steering Committee's directives.

Dave mentioned that today's MFRC meeting will be his last day of work until Thursday, April 9, as he is taking a trip to Asia with his family. Calder Hibbard will be Acting Executive Director while he is gone.

As part of the governor's Unsession, the DNR and all other state agencies are proposing streamlining of existing statutes and removal of old, outdated laws. The MFRC's role in this has been the proposal the council supported unanimously at its November 13, 2013 meeting to revise the Sustainable Forest Resources Act (SFRA). The bill to revise the SFRA is being carried by Representative Dill and Senator Saxhaug (HF 2165 / SF 1701). It has passed in several Committees in the Senate and in the House.

Dave explained that the University of Minnesota was approached by the LCCMR asking that the University submit a proposal to create a Terrestrial Invasive Species Research Center. Brian Buhr recently testified at two legislative hearings in support of SF2102 and HF 1976, companion bills that would create such a Center. Dave explained that the Terrestrial Invasive Species Research Center would be separate from the Aquatic Invasive Species Center, although there would be a need for interaction between the two entities.

Committee Reports

Personnel and Finance

Bob Stine reported that the Personnel and Finance Committee has not met.

Site-Level

Dave Parent reported that the Site-level Committee has not met.

Landscape Planning/Coordination

Shaun Hamilton reported that the Landscape Committee met last Thursday, March 13. Lindberg provided draft minutes as a handout. The meeting focused on the timing and process of the Northeast (NE) Landscape Plan update. The process will likely be extended by at least two months.

Information Management

Calder Hibbard reported that the Information Management Committee met on February 10 in St. Paul. The committee discussed the forest industry competitiveness study, the SFIA audit, and a strategic analysis of invasive species. The committee also provided input to Kathleen Preece and the MFRP on the prospective conference discussed in the Chair's remarks. Amber Ellering updated the committee on the status of the proposed listing of the Northern long-eared bat on the Federal Endangered Species List.

Written Communication to the MFRC

The MFRC received a significant communication that relates to the NE Landscape Plan revision process. The Nature Conservancy (TNC) Assistant Chapter Director, Doug Shaw, sent a strongly-worded letter to Dave Zumeta regarding concerns about the draft version of the NE plan released in February to the NE Planning Committee. In response to concerns raised by TNC, Superior National Forest, and others, Dave decided to delay completion of the NE Landscape Plan back by two months; however, it may be moved back even further, if necessary. Dave added that many other entities provided comments on the NE Plan, but the letter from TNC was the only formal communication to the council.

Committee of the Whole: Approve recommendations in the final report from the Ad Hoc Committee on Site-level Forest Management Implementation Goals

Bob Stine introduced Rob Slesak. Rob explained that motion to be voted on is an approval of the recommendations within the final ad hoc committee report, not on the report itself. The report details implementation goals for the voluntary site-level forest management guidelines. Rob explained that this is the second product from the ad hoc committee; the first was the field guide. There have been consistent trends in the monitoring reports over time. We need to determine if implementation levels are sufficient. Rob described the task given to the ad hoc committee.

Broad conclusions were made over a series of meetings. Generally, risks of forest management impact to resources are low overall for the following reasons: 1) low harvesting levels, 2) forgiving land, and 3) less intensive management practices. Areas of improvement exist, however, and the guidelines are seen as integral to forest management practices. The report contains three sections of recommendations: 1) policy, 2) training and research, and 3) implementation monitoring. Rob discussed these sections.

Bob Stine said that the MFRC will approve the report, but Forrest might provide input on following-up with recommendations made to the DNR. There may be a series of implementation steps that we will need to discuss as a Council. Discussion ensued regarding the need for careful communication in garnering support for the recommendations to maintain the voluntary status of the guidelines. Bob indicated that the council would follow-up with tailored letters to organizations regarding the recommendations.

Susan Solterman Audette commented on the disconnect between the mapping that DNR uses and that which is used by the council. This needs to be addressed as it will be an ongoing issue. Rob replied that Dick Rossman is working on this. He will speak to the Site-level Committee and eventually to the council once this work is completed. In terms of monitoring protocols, the SFRA mandates that we “conduct monitoring at appropriate scales...to the extent possible.” A watershed scale is better for our purposes. Discussion ensued regarding the effect of watershed monitoring on creating a more systematic scheme of monitoring. Forrest added that this will allow us to tailor outreach to particular areas based on data. Alan Ek requested that monitoring data should be stored somewhere that is publically accessible. Rob replied that the IIC would be a perfect venue for this. Bob Stine noted that we will follow-up on this.

Dave Zumeta noted that there are not adequate funds in Site-level Program budget to print the field guides. This reflects the challenges of a 26% budget cut over the past several years. The MFRC has committed \$3,000, but about \$47,000 is needed. The DNR will commit \$20,000 of creative services time; other entities are being asked to provide the remaining \$24,000.

Wayne Brandt moved, and Alan Ek seconded, the motion to approve the recommendations in the final report from the Ad Hoc Committee on Site-level Forest Management Implementation Goals. *The motion passed unanimously.*

Status of DNR and MFRC 2014 legislative initiatives

Bob Stine introduced Forrest Boe. Forrest explained that this is a bonding session. The DNR has a House bill – The Department of Natural Resources Section and Asset Preservation Section regarding maintenance of buildings and other infrastructure. \$1 million is bookmarked for roads. There is also money bookmarked for Minnesota Forests for the Future. A priority project is the Sand Plains Aquifer by Wadena, which includes the purchase of Potlatch lands that are being converted to potato fields. These are fee acquisitions. Other lands in northern Minnesota are identified for acquisition as well.

No Senate file has been introduced yet.

Forestry is interested in other bonding bills that are not department initiatives, including seed collection. Direct seeding is a more economical way to pursue reforestation. There are also some School Trust acquisition bond bills. The division is also interested in Outdoor Heritage bills. The SFRA revision bill is also of interest to the division, as is a bill regarding lottery prize money.

Forrest spoke about the DNR Unsession Bill. The Division of Forestry has only had one small piece in this particular bill as it did a lot of Unsession work last year, especially in chapter 90 timber sales. The Unsession piece concerns bough buyer information language cleanup. Also, changes in tillable land requirements are included to eliminate boundary, fencing, and access issues.

Dave Zumeta added that Calder Hibbard will follow up on the proposed streamlining of the SFRA in Dave's absence.

Northeast Landscape Plan revision process and timeline

Bob introduced Shaun Hamilton and Lindberg Ekola. Lindberg explained that the NE Planning Committee met on March 7 to review the draft NE Plan. The Landscape Committee subsequently extended the deadline to publish the plan, as explained earlier.

The NE Planning Subcommittee will meet on April 3. The new deadline approved by the Landscape Committee to finalize the plan is July 3. Lindberg provided a revised schedule. The Subcommittee intends to bring the plan to the July Council meeting for final approval. Lindberg also discussed the subcommittee charge and its focus. Lindberg will provide a draft Plan, summary documents, and the executive summary prior to the next MFRC meeting in May.

Discussion ensued about the TNC's request to extend the finalization of the NE Plan. Dave Zumeta explained that there is an opportunity cost of Lindberg and Michael Lynch deferring work in other areas and other projects. The NE is the most challenging place to work in the state, and while the extension will take place, we received comments that the process has taken too long. We have to strike a balance between the interests involved. Susan Solterman Audette added that it is a shame that the NE was the first updated plan. It is the heart of our forest base. Before we move on, we need to evaluate this process to avoid the same mistakes.

If you understand that everyone weighs in at the end with strong opinions, they were not involved in the process. Wayne Brandt added that the management of this process is not working. Alan Ek commented that, perhaps, the next set of landscape plans should be more focused on visioning versus operations. Bob Stine noted that we started this process with promised resources that did not come through.

Value added opportunities for Minnesota's primary forest products industry

Bob Stine introduced Dick Hemmingsen, and mentioned that Dick is on the Minnesota Forest Industry Global Competitiveness Assessment Work Group. Dick is a senior fellow from the U of MN Department of Bioproducts and Biosystems Engineering. Dick explained the biorefinery concept. The goal of a biorefinery is to utilize all parts of the feed stock to produce bioproducts such as biomaterials, biochemicals, biofuel, and bioenergy. Biomaterials create the highest value products. Woody biomass has two platforms for producing bioproducts: sugar and thermochemical.

Hemicellulose and cellulose are sugars within trees which can be extracted to produce plastics, solvents, and polyols. Segetis and Silvanova are companies doing this. Weyland extracts glucose to produce various products. The thermochemical platform deconstructs material by gasification, pyrolysis or liquefaction to produce bioproducts. Chemrec, a Swedish company, extracts black liquor from pulp to produce a gaseous fuel (dimethyl ether). Volvo has aimed their next generation truck production at dimethyl ether diesel engines. Pyrolysis oil is another potential market. NRRI is working on a process called torrefaction. This process increases energy density, and retains most of the original energy content.

Dick discussed the use of nanocellulose at the Sappi Cloquet Mill. There are many potential uses for this material. There are also opportunities for materials derived from lignin, which is the biggest technical barrier to producing cellulosic biofuels. It is costly and difficult to separate lignin from cellulose, and a low value product results. Simo Sarkanen is working to degrade lignin to create higher value products. We need to figure out how to use the feedstocks we have rather than import them.

In response to a question, Dick explained that a balance must be struck between technologies and quality of feedstock. We need to find technologies that are compatible and synergistic with existing industry. A lot of harvestable wood can be taken without impacting existing infrastructure. The rub is affording to build and run the necessary technologies. Wayne Brandt added that this is, unquestionably, an important component of the future forest products industry. Industry is not fearful of this change; it strives towards this conversion.

Possible regulatory actions for Mountain Pine Beetle, and update on proposed Gypsy Moth quarantine

Dave Zumeta introduced Geir Friisoe and Mark Abrahamson of the Minnesota Department of Agriculture. Lucy Hunt was scheduled to present, but she was unable to attend. Geir explained that the council is important to the MDA. Connecting with industry, DNR, and the MFRC informs development of regulations. Dave also introduced Brian Aukema, forest entomologist at the University of Minnesota.

Geir spoke about the proposed quarantine of gypsy moth in Lake and Cook Counties. He explained gypsy moth trapping methods to assess their population levels and noted the very large increase in gypsy moth catches in the northeast corner of the state. MDA is trying to work very closely with affected groups to form the specifics of the quarantine. The Minnesota quarantine is to be based on federal standards to sync with a parallel federal quarantine. There have been very specific concerns raised by industry groups. The MDA has forwarded these concerns to USDA Animal and Plant Health Inspection Service, but movement has been slow on this. Nonetheless, a significant number of changes will be made to the draft quarantine.

Wayne Brandt commented that this is a difficult issue. Geir and his staff have been really good to work with; it's a highly technical area. They are dedicated to making things right and working with people to come up with workable solutions to address vexing, increasing insect problems. We may not agree with everything, but they have been very good to work with.

Alan asked about the potential for a statewide quarantine. Geir explained that this is not a strategy MDA would support. The MDA believe that concerns about the quarantine can be addressed through compliance agreements. A statewide quarantine would have implications for other industries, such as apiaries and nurseries. Federal funding would be eliminated as well.

Brian Aukema spoke next about the native mountain pine beetle. It feeds on all species of pines in mass attacks, but prefers 60-100 year-old trees. Trees often die rapidly in spot infestations through interruptions in water-conducting tissues. Landscape-scale infestations devastate the northwestern U.S. and Canada. The mountain pine beetle is not native to Minnesota, but two invasion pathways exist: 1) Canadian boreal forest where lodgepole pine hybridizes with jack pine, 2) movement of wood from the Black Hills of South Dakota. The beetle would likely do well in all of our pine species. Brian explained why we should be concerned about the mountain pine beetle, including their rapid movement and the futility of management during outbreaks.

Brian explained that there is 70 percent mortality in historically affected areas but 99.9% mortality in other areas. Canada has invested \$1.5 billion in federal and industrial funds. This is This beetle is a potential game changer. Brian discussed several management tactics, including clear cutting affected areas and sanitization. Mountain pine beetles often infest weakened stands with existing native beetles. Thinning can aggravate the program if it is not completed early.

Mark Abrahamson described the risk of mountain pine beetle arriving in Minnesota. There is not much we can do to prevent the mountain pine beetle's arrival from the north, but we can affect the route across the plains. Larger mills in Minnesota are not using western materials, but some specialty mills may. The 2013 Trap Survey looked for the presence of mountain pine beetle in Minnesota. Funnel traps baited with pheromones caught no mountain pine beetle. This survey will continue and expand, pending funding from the LCCMR.

Mark also covered regulatory options to prevent the introduction of mountain pine beetle, including an exterior quarantine. Minnesota can regulate materials coming from other states, but only the U.S. Department of Agriculture has the authority to regulate materials arriving from Canada. The introduction of mountain pine beetle is a small risk, but it is present and the repercussions would be serious.

Public Communications to the MFRC

None.

MFRC Member Comments

Dave Zumeta noted that Darla Lenz was not in attendance because she was in Washington D.C. receiving an award for the Chippewa National Forest from the Chief of the USDA Forest Service.

Forrest Boe deferred to Clarence Turner to provide an update on the Minnesota Climate Change Advisory Group (MCCAG). There is a current effort to reexamine the group's final report to former Governor Pawlenty. In 2008, the MFRC was charged with evaluating opportunities to reduce the state's greenhouse gas emissions by 30 percent by planting a million acres of new forest. The analysis Clarence led indicated that this goal was partially attainable given proper incentives being put in place, but he hopes the current effort will identify more realistic mechanisms to achieve policy goals. Clarence will represent the DNR and the council at upcoming meetings.

MFRC Member Comments

Wayne Brandt moved, and Dave Parent seconded, adjourning the meeting. *The meeting was adjourned at 2:32 p.m.*